# FY2023 Interim Report: 1H Results & Progress in New Mid- to Long-Term Management Plan

# **KUREHA CORPORATION**

November 9, 2023



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### FY2023 Performance Overview

### FY23 Half-Year Results & New Full-Year Forecast

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	1H FY23	1H FY22	1H Changes YoY	FY23 New Forecast	FY22 Actual	Changes YoY
Advanced Materials	34.0	47.3	-13.3	69.0	82.7	-13.7
Specialty Chemicals	17.1	17.5	-0.4	33.2	31.8	+1.4
Specialty Plastics	23.4	23.8	-0.3	46.6	46.8	-0.2
Construction	5.4	4.2	+1.1	13.5	11.3	+2.2
Other	8.6	8.9	-0.3	17.7	18.7	-1.0
Revenue Segment Total	88.5	101.8	-13.3	180.0	191.3	-11.3
Advanced Materials	2.8	9.0	-6.2	5.1	10.1	-5.0
Specialty Chemicals	0.8	1.6	-0.9	0.7	1.8	-1.1
Specialty Plastics	4.3	4.3	+0.0	6.9	8.6	-1.7
Construction	0.2	0.3	-0.1	0.8	0.9	-0.1
Other	1.1	1.4	-0.3	2.0	2.8	-0.8
Core Operating. Profit Total	9.2	16.6	-7.4	15.5	24.3	-8.8
Adjustments	0.0	-0.2	+0.2	-1.5	-2.0	+0.5
Operating Profit	9.1	16.7	-7.6	14.0	22.4	-8.4
Profit attributable to Kureha	6.8	12.2	-5.4	10.5	16.9	-6.4

(in billions of yen)

### Half-year revenue and profits declined on a year-on-year basis

- PVDF, a binder material for automotive LiBs, saw a drastic shift from its exceptional growth driven by the rapid expansion of electric vehicles a year ago-- sharp declines in revenue and profits led by lower sales volume and lower pricing due to slower market conditions and customer destocking
- A decrease in equity in earnings from a PPS-related affiliate
- Revenue and profits improved for PGA

### Full-year outlook & background vs 1H

- PVDF volume for 2H will likely remain unchanged at 1H and 2H/FY22 levels as a market recovery for EVs and LiBs is expected to delay into FY24. Business profits will further decrease due to a lack of income from inventory revaluations recorded in 1H and lower pricing for primary customers.
- Equity in PPS-related affiliate's earnings will improve but fall below our initial projection due to a delay in pricing action
- PGA business profit to increase substantially owing to inventory revaluation
- A decrease in 'Other Expenses' expected due to the absence of an impairment loss related to packaging materials recorded in FY22, partially offset by expenses required for Iwaki Factory PVDF capacity enhancement

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# I. FY2023 Half-Year Results (April 1, 2023 through September 30, 2023)



# 1H FY2023 Financial Summary (1)

				(in billions of	of yen)
	1H FY23	1H FY22	Changes vs. 1H FY22	1H Forecast	Changes vs. Forecast
Revenue	88.5	101.8	-13.3 (-13.0%)	96.0	-7.5 (-7.8%)
Core operating profit	9.2	16.6	-7.4 (-44.6%)	8.0	+1.2 (-14.8%)
Operating profit	9.1	16.7	-7.6 (-45.3%)	8.0	+1.1 (+14.4%)
Profit before taxes	9.9	17.4	-7.5 (-43.3%)	8.0	+1.9 (+23.2%)
Profit attributable to owners of Kureha	6.8	12.2	-5.4 (-44.2%)	5.3	+1.5 (+28.3%)
Basic profit	¥355 20	¥624 60			

per share (¥)

¥355.29 ¥624.60

### (Currency exchange rates)

1USD=	¥134.0	¥141.1	¥135.0
1EUR=	¥138.8	¥153.5	¥140.0
1CNY=	¥19.9	¥19.8	¥19.0

### Vs. 1H FY22

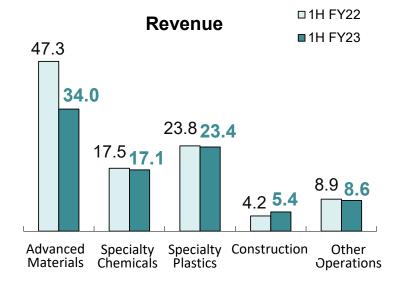
- Revenue fell primarily due to weakening in PVDF (LiB binder) and agrochemicals
- Operating profit decreased largely on slower PVDF performance, a decrease in equity in earnings from a PPS-related affiliate and lower agrochemical volume

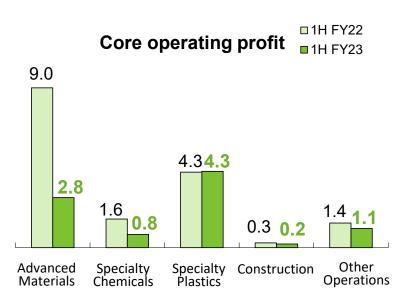
### Vs. 1H Forecast

- Revenue: Slower-than-expected PVDF performance, agrochemical sales partly postponed to 2H
- Operating profit: Impact of PGA-related inventory revaluation (initially scheduled for 2H), partially offset by declines in PVDF sales and equity in earnings from a PPSrelated affiliate

# 1H FY2023 Financial Summary (2)

### **Revenue & Operating Profit by Segment (vs. 1H FY22)**





### Factors affecting operating profit

Advanced Materials:	Declines in PVDF and other functional products sales partially offset by expansion of PGA and PPS
Specialty Chemicals:	Lower agrochemical and pharmaceutical sales
Specialty Plastics:	Sales expansion of home products offset by a decline in packaging materials
Constructions:	Higher private construction volume
Other Operations:	Slower logistics and hospital operation partially offset by higher industrial treatment volume

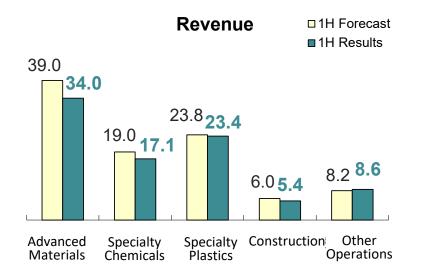
(in billions of yen)

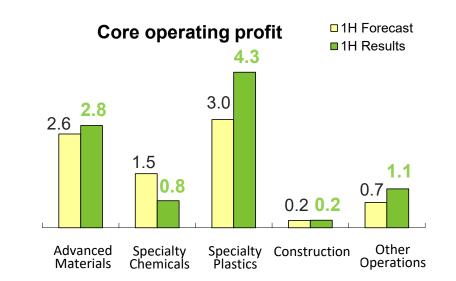
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# 1H FY2023 Financial Summary (3)

### **Revenue & Operating Profit by Segment (vs. Forecast)**





### Factors affecting operating profit

Advanced Materials:	Impact of PGA-related inventory revaluation (+¥2.1bn)
Specialty Chemicals:	Shipment of some agrochemicals postponed to 2H
Specialty Plastics:	Sales expansion and delayed spending of expanses in home products partially offset by slower packaging materials sales
Construction:	Performed as forecast
Other Operations:	Higher industrial waste treatment volume

### (in billions of yen)

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# Segment Performance: Advanced Materials

			(in billior	ns of yen)	Vs. 1H FY22
	1H FY23	1H FY22	Change	%	Revenue > Operating profit >
Advanced Materials					Advanced plastics revenue and profit down:
Advanced plastics	25.0	36.5	-11.6	-32%	- Expansion of sales of PPS and PGA - PVDF (LiB binder) demand weakened in the
Carbon products	3.9	3.5	0.4	+12%	slower EV market and due to customer inventory adjustments
Other	5.1	7.3	-2.2	-30%	Carbon products revenue and profit up:
Revenue	34.0	47.3	-13.3	-28%	<ul> <li>Higher carbon fiber insulation sales for high-heat furnace applications</li> </ul>
Operating profit	2.8	9.0	-6.2	-69%	



# Segment Performance: Specialty Chemicals

KUREHA	CORPORATION

	(in billions of yen)				Vs. 1H FY22
	1H FY23	1H FY22	Change	%	Revenue >
Specialty Chemicals					Agrochemicals
Agrochemicals	4.9	6.6	-1.7	-26%	profit down:
Pharmaceuticals	1.7	2.0	-0.3	-16%	- Part of ag - Impact of
Industrial chemicals	5.8	4.7	1.2	+25%	Industrial chen - Higher pric
Other	4.6	4.2	0.4	+10%	- Improved p to recover
Revenue	17.1	17.5	-0.4	-2%	
Operating profit	0.8	1.6	-0.9	-54%	

/s. 1H FY22
Revenue 🖌 Operating profit 🖌
Agrochemicals & Pharmaceuticals revenue and profit down: - Part of agrochemicals sales postponed to 2H - Impact of mandatory drug price revisions
<ul> <li><u>Industrial chemicals revenue and profit up:</u></li> <li>Higher pricing to reflect higher raw material cost</li> <li>Improved profit margins enabling the business to recover from an operating loss</li> </ul>

# Segment Performance: Specialty Plastics

<b>KUREHA</b>	CORPO	ORATION
NONE III V		

		(in billions of yen)		
	1H FY23	1H FY22	Change	%
Specialty Plastics				
Home products	12.2	11.8	0.5	+4%
Fishing lines	2.5	2.4	0.1	+2%
Packaging materials	7.0	7.4	-0.5	-6%
Other	1.7	2.2	-0.4	-19%
Revenue	23.4	23.8	-0.3	-1%
Operating profit	4.3	4.3	0.0	+1%

Vs. 1H FY22	
Revenue ↘ Operating profit →	
<u>Home products &amp; Fishing lines reven</u> - Higher pricing for food wrap film ( carried out in and after 2H FY22)	
Packaging materials revenue down, p - Sales declines in heat-shrink mul PVDC film - Fewer expenses	

# Segment Performance: Construction

			(in billions	of yen)
	1H FY23	1H FY22	Change	%
Construction				
Revenue	5.4	4.2	1.1	+27%
Operating profit	0.2	0.3	-0.1	-22%
Other Operations				
Environmental engineering	5.4	5.2	0.2	+4%
Logistics	0.8	1.3	-0.5	-38%
Hospital operations	2.1	2.1	-0.0	-1%
Others	0.3	0.3	-0.0	-3%
Revenue	8.6	8.9	-0.3	-4%
Operating profit	1.1	1.4	-0.3	-22%

Vs. 1H FY22

**Revenue**  $\checkmark$  **Operating profit**  $\rightarrow$ 

- Profit remained flat despite higher volume for private construction

### Revenue > Operating profit >

- Environmental engineering revenue up, profit down:
  - Higher industrial waste treatment volume, including low-level PCB waste
  - Higher expenses

Logistics revenue and profit down

Hospital Operations revenue down, operating loss widened



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		(in b	oillions of yen)
	1H FY23	1H FY22	Increase/ Decrease
Profit before income tax	9.9	17.4	-7.5
Depreciation	5.7	5.7	-0.0
Other	-8.3	-14.4	+6.1
Cash flow from operating activities	7.2	8.7	-1.4
Cash flow from investing activities	-7.6	-4.9	-2.7
Free cash flow	-0.3	3.8	-4.1
Cash flow from financing activities	-3.4	-6.8	+3.4
Effect of exchange rate changes on cash and cash equivalents	1.4	1.5	-0.1
Increase/decrease in cash and cash equivalents	-2.3	-1.5	-0.8
Cash and cash equivalents at beginning of period	32.2	30.6	+1.6
Cash and cash equivalents at end of period	29.9	29.1	+0.7

KUREHA

### (in billions of yen)

### Assets

Total assets

	Sept. 30 2023	Mar. 31 2023	Increase/ Decrease
Cash and cash equivalents	29.9	32.2	-2.3
Trade and other receivables	34.3	31.9	+2.4
Inventories	50.5	52.0	-1.5
Other current assets	4.3	4.9	-0.6
Total current assets	119.0	121.0	-2.0
Property, plant and equipment	122.6	117.4	+5.2
Intangible assets	4.7	4.5	+0.3
Investments and other assets	59.7	53.5	+6.2
Total non-current assets	187.0	175.4	+11.6

### **Liabilities and Equity**

	Sept. 30 2023	Mar. 31 2023	Increase/ Decrease
Trade and other payables	26.5	27.7	1.2
Interest-bearing debt	32.7	26.3	+6.4
Provisions	8.1	8.5	-0.4
Other liabilities	17.5	17.2	+0.3
Total liabilities	84.8	79.6	+5.1
Shareholders' equity	18.2	18.2	
Capital surplus	14.7	14.7	
Less: Treasury stock	<b>-6.1</b> <sup>*1)</sup>	-8.7	+2.6
Retained earnings	<b>174.8</b> *2)	179.0	-4.1
Other components of equity	18.0	12.1	+5.9
Non-controlling interests	1.6	1.6	+0.0
Total equity	221.2	216.8	+4.5
Total liabilities and equity	306.0	296.4	+9.6

Note Kureha amortized of 1,280,000 treasury shares on June 30, 2023, which affects the following items.

296.4

(\*1) Treasury stock (Less): Treasury shares disposed (+¥9.1bn), Treasury shares acquired (-¥6.5bn)

306.0

(\*2) Retained earnings: Treasury shares disposed (-¥9.1bn), Net income (+¥6.8bn); Dividend payment (-¥2.8bn), etc.

+9.6

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# II. FY2023 Full-Year Outlook (April 1, 2023 through March 31, 2024)



# FY2023 Financial Forecast (1)

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	1H	2H	FY23 New Forecast	FY22 Results	Change vs. FY22	FY23 Previous Forecast	Change vs. Previous Forecast	
Revenue	88.5	91.5	180.0	191.3	-11.3 (-5.9%)	190.0	-10.0 (-5.3%)	V
Core operating profit	9.2	6.3	15.5	24.3	-8.8 (-36.2%)	22.0	-6.5 (-29.5%)	
Operating profit	9.1	4.9	14.0	22.4	-8.4 (-37.4%)	22.0	-8.0 (-36.4%)	0
Profit before taxes	9.9	5.1	15.0	23.0	-8.0 (-34.8%)	22.0	-7.0 (-31.8%)	
Profit attributable to owners of Kureha	6.8	3.7	10.5	16.9	-6.4 (-37.8%)	15.5	-5.0 (-32.3%)	
Basic profit per share	(¥)		¥550.04	¥864.30	)	¥819.35	5	

#### [Currency exchange rates and sensitivity]

	FY22 Actual	FY23 Initial estimate	1H FY23 Actual	2H FY23 New estimate	Forex sensitivity *Impact of an one-yen depreciation on operating profit per 6-month period
1USD=	¥135.5	¥135.0	¥141.1	¥141.0	An increase of ¥0.06bn
1EUR=	¥141.0	¥140.0	¥153.5	¥153.0	An increase of ¥0.03bn
1CNY=	¥19.8	¥19.0	¥19.8	¥19.5	An increase of ¥0.09bn

#### Vs. FY22

(in billions of ven)

- Revenue to increase in Specialty Chemicals and Construction and decrease in Advanced Materials, Specialty Plastics and Other Operations
- · Core operating profit down in all segments

### **Vs. Previous Forecast**

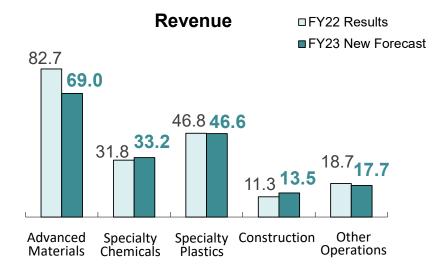
 Revenue and profit to fall below previous forecast levels due to weakening in Advanced Materials, including PVDF and PPS

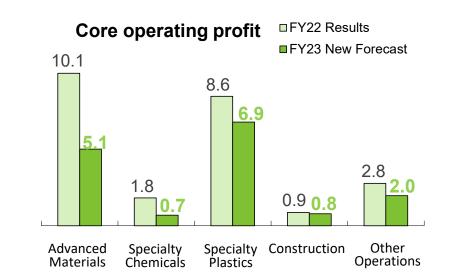
### %) Operating profit changes from 1H to 2H

- Sales volume in the PVDF business is expected to remain unchanged, but profit is expected to fall in the 2H due to the absence of revaluation profit (approx. 1 billion yen) and price drop to major customers.
- Temporary cost increases are expected due to equipment trouble at the Iwaki Factory and company-wide adjustments, such as the cost of removing existing facilities (over 1 billion yen) in preparation for the expansion of the PVDF plant.

# FY2023 Financial Forecast (2)

### Segment Revenue & Operating Profit Forecast (vs. FY22 Results)





### Factors affecting operating profit

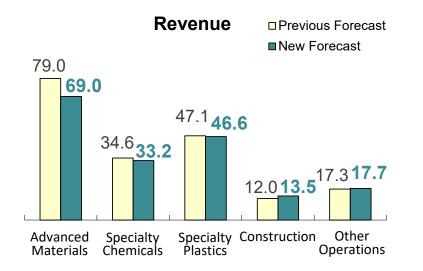
Other Operations:	Lower low-level PCB waste treatment sales, higher cost	KUREHA
Construction:	Higher construction material cost partially offset by higher sal construction	les in private
Specialty Plastics:	Slower sales for packaging materials and other plastic produce	
Specialty Chemicals:	Impact of drug price revisions, higher R&D expenses for agro	ochemicals
Advanced Materials:	Slower PVDF performance and a decrease in equity in earnir affiliate partially offset by PGA sales expansion	ngs from PPS-related
• •	•••	

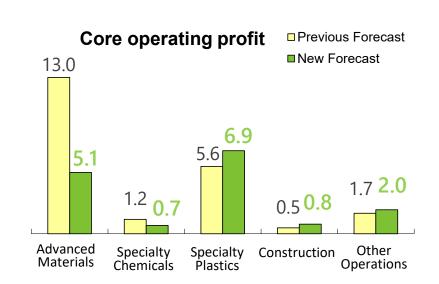
(in billions of yen)

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# FY2023 Financial Forecast (3)

### Segment Revenue & Operating Profit Forecast (vs. Previous Forecast)





### Factors affecting operating profit

Advanced Materials:	Lower PVDF sales, a decrease in equity in earnings of PPS-related affiliate
Specialty Chemicals:	Slower agrochemicals and industrial chemicals sales
Specialty Plastics:	Expansion of food wrap film partially offset by weakening in packaging materials
Constructions:	Higher private construction volume
Other Operations:	Higher industrial waste treatment sales

### **KUREHA CORPORATION**

(in billions of yen)

# Segment Forecast: Advanced Materials

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KUREHA

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		(in billions of yen)			Vs. FY2
	FY23 New Forecast	FY22 Results	Change	%	Reve
Advanced Materials					<u>Advar</u>
Advanced plastics	48.5	63.0	-14.5	-23%	- PG - Slo
Carbon products	7.5	6.9	0.6	+8%	- Ad affi
Other	13.0	12.7	0.3	+2%	<u>Carbo</u>
Revenue	69.0	82.7	-13.7	-17%	- Hig furr
Operating profit	5.1	10.1	-5.0	-50%	

/. . ....

[Previous Forecast: Revenue ¥79.0bn, Ope. Profit ¥13bn]

n)	Vs. FY22
	Revenue > Operating profit >
% % %	<ul> <li>Advanced plastics revenue and profit down:</li> <li>PGA sales expansion</li> <li>Slower PVDF sales in the automotive LiB market</li> <li>A decrease in equity in earnings of PPS-related affiliate</li> <li>Carbon products revenue and profit up:</li> <li>Higher carbon fiber sales used for high-heat furnace insulation</li> </ul>
%	

**Vs. Previous Forecast** 

Revenue > Operating profit >

- Weaker PVDF sales due to the slow EV market, impact of customer destocking
- Slower global demand for PPS

# Segment Forecast: Specialty Chemicals

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			(in billions	s of yen)	Vs. FY22
	FY23 New Forecast	FY22 Results	Change	%	Revenue  Operating profit
Specialty Chemicals					Agrochemicals & Pharmaceuticals revenue up, profit down:
Agrochemicals	9.5	9.3	0.2	+2%	- Higher pharmaceutical sales partially offset by lower
Pharmaceuticals	4.0	3.8	0.2	+4%	price (impact of mandatory drug price revisions on Kureha therapeutic agent for chronic renal failure)
Industrial chemicals	10.5	9.9	0.6	+6%	<ul> <li>Higher pricing for agrochemicals to reflect higher raw material cost partially offset by lower sales</li> </ul>
Other	9.2	8.7	0.5	+6%	<ul> <li>Higher R&amp;D expenses for the development of new agrochemicals</li> </ul>
Revenue	33.2	31.8	1.4	+4%	Industrial chemicals revenue and profit down:
<b>Operating profit</b> [Previous Forecast: Revenue	<b>0.7</b> ¥34.6bn. Op	1.8 e. Profit ¥1	-1.1 .2bnl	-62%	<ul><li>Higher pricing for organic and inorganic chemicals</li><li>Higher expenses</li></ul>
	· · · · · · · · · · · · · · · · · · ·		5 · · · 3		

### **Vs. Previous Forecast**

Revenue > Operating profit >

- Lower agrochemical volume
- Lower industrial chemical volume

# Segment Forecast: Specialty Plastics

			(in billions	of yen)
	FY23 New Forecast	FY22 Results	Change	%
Specialty Plastics				
Home products	23.0	22.5	0.5	+2%
Fishing lines	5.0	4.7	0.3	+5%
Packaging materials	15.0	15.3	-0.3	-2%
Other	3.6	4.2	-0.6	-14%
Revenue	46.6	46.8	-0.2	-0%
Operating profit	6.9	8.6	-1.7	-20%

[Previous Forecast: Revenue ¥47.1bn, Ope. Profit ¥5.6bn]

s. FY22	Operating profit <b>\</b>
Home products	<u>s revenue up, profit flat:</u> g for food wrap film (for and after Oct. ent)
Fishing lines re	venue up, profit down
- Slower PVD0	erials revenue and profit down: C film sales in the South East Asia market

- Higher fuel and raw material costs

**Vs. Previous Forecast** 

Revenue ↘ Operating profit ↗

- Lower packaging materials volumes
- Better-than-expected demand for food warp film in the post-pandemic market

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# Segment Forecast: Construction

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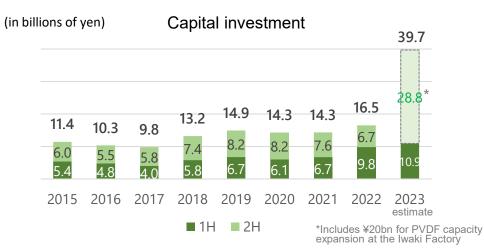
			(in billions	s of yen)	Vs. FY22
	FY23 New Forecast	FY22 Results	Change	%	Construction: Revenue
Construction					- Higher construction volume in the private sector
Revenue	13.5	11.3	2.2	+19%	Other Operations: Revenue 🝾 Operating profit 💊
Operating profit	0.8	0.9	-0.1	-9%	Environmental engineering revenue up, profit down - Higher expenses
[Previous Forecast: Reve Other Operations	enue ¥12.0bn	, Ope. Profit	t ¥0.5bn]		Logistics revenue and profit down Hospital Operations revenue up, operating loss narrowed
Environmental engineering	11.5	11.3	3 0.2	+1%	Vs. Previous Forecast
Logistics	1.5	2.6	6 -1.1	-43%	Construction: Revenue < > Operating profit <>
Hospital operations	4.3	4.1	1 0.2	+4%	- Higher private construction volume
Others	0.4	0.6	6 -0.2	-33%	Other Operations: Revenue   Operating profit
Revenue	e 17.7	18.7	7 -1.0	-5%	- Higher industrial waste treatment volume
Operating profit	t 2.0	2.8	3 -0.8	-29%	
[Previous Forecast: Reve	enue ¥17.3bn	i, Ope. Profi	t ¥1.7bn]		KUREHA

(in billions of yen)

	FY23 New Forecast	FY22 Results	Change
Profit before income tax	15.0	23.0	-8.0
Depreciation	11.2	11.6	-0.4
Other	-3.8	-11.9	+8.1
Cash flow from operating activities	22.4	22.7	-0.4
Cash flow from investing activities	<b>-40.2</b> *	-11.1	-29.1
Free cash flow	-17.9	11.6	-29.5
Cash flow from financing activities	17.3	-10.5	+27.8
Effect of exchange rate changes on cash and cash equivalents	0.0	0.4	-0.4
Increase/decrease in cash and cash equivalents	-0.6	1.6	-2.1
Cash and cash equivalents at beginning of period	32.2	30.6	+1.6
Cash and cash equivalents at end of period	31.6	32.2	-0.6

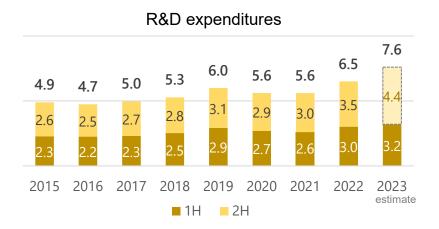
\* Includes our investment of approximately ¥20bn in expanding PVDF production at the Iwaki Factory

# Key Indicators (1)





Depreciation expenses



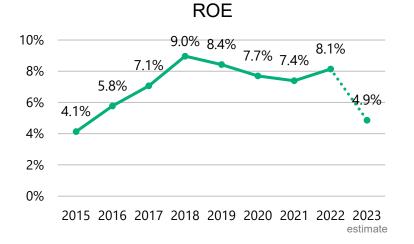
Interest-bearing debt

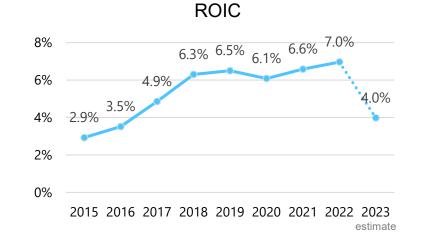


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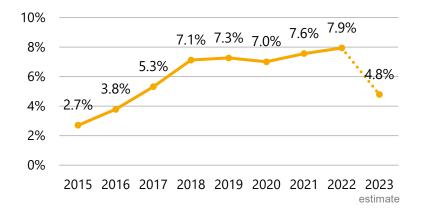
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# Key Indicators (2)





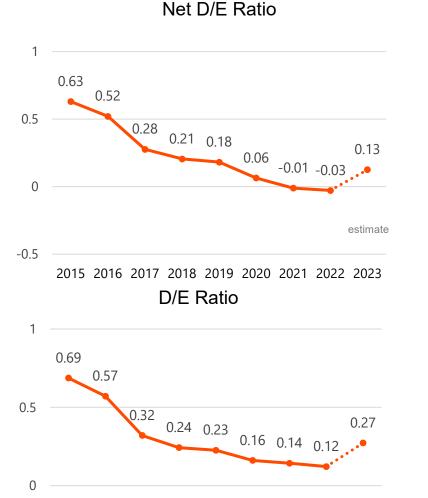
ROA



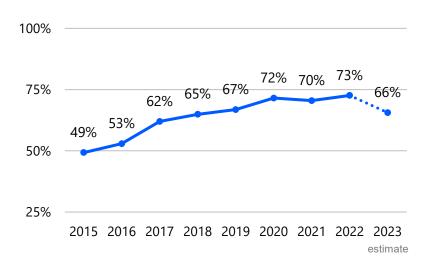
**KUREHA CORPORATION** 

# Key Indicators (3)

**KUREHA CORPORATION** 



2015 2016 2017 2018 2019 2020 2021 2022 2023 estimate



### Equity Ratio

# III. 10-year Progress of Kureha Group

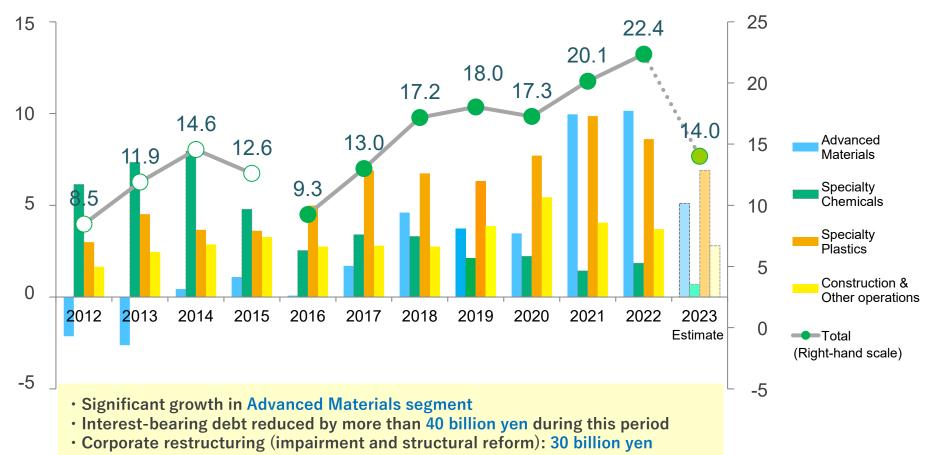


# Kureha Group: 10-Year Growth Trajectory

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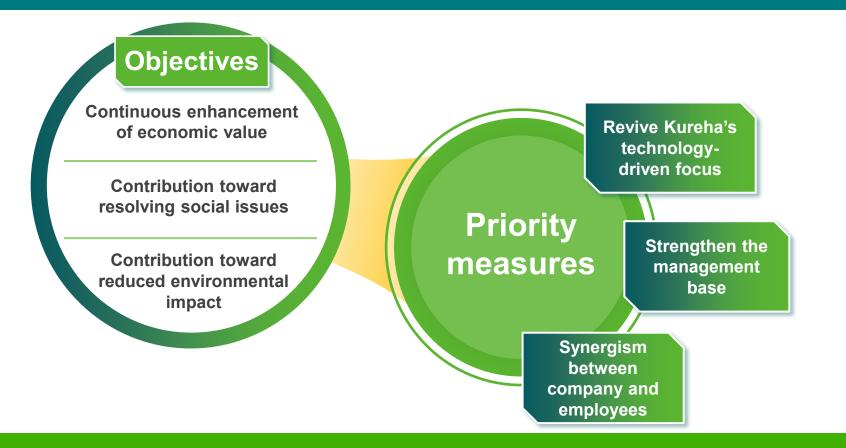
• Cost reduction effect: 14.6 billion yen (simple cumulative amount for the period of Corporate Reform PJ activities from FY2013 to FY2022)

# IV. Progress of Initiatives under the New Mid- to Long-term Management Plan



### **Management Policy**

### **KUREHA CORPORATION**



To realize the Kureha Vision, we have established a Management Policy consisting of three objectives and three priority measures and we have carried it out since April 2023.



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# **PVDF** Business (1)

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**PVDF** sales volume trends

Sales volume (index), with 1H FY2022 set as 100.

### Market environment and future outlook

- The European EV market, which Kureha is targeting, is currently stagnant due to slumping consumption and other factors. As a result, LiB manufacturers' inventory adjustments for materials and batteries took longer than expected. A high proportion of our binders are used for European EVs, and we are affected by this slowdown.
- Customer inventory adjustments are expected to be completed in 2H FY2023. Orders for materials are forecast to recover from FY2024, due to the recovery of the European market and the rise of the North American market.
- From FY2024, expansion in the North American LiB market is expected to contribute to business expansion.
- Based on the above, demand for our PVDF binder is expected to continue to expand sustainably. Our growth scenario of mid- to longterm expansion of this business in line with the EV market's expansion is unchanged.

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# PVDF Business (2)

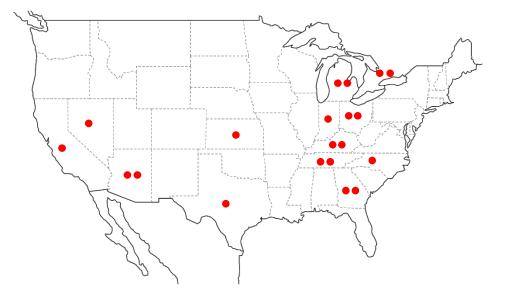
### LiB manufacturers' expansion plans

In August 2023, Kureha announced a plan to increase capacity by 8,000 ton/year at the Iwaki Factory (to be completed March 2026). Including debottlenecking of existing facilities, the production capacity in FY2026 will be approximately 20,000 ton/year, which will be doubled from 11,000 tons in FY2022.

The background is that many existing and target customers are progressing with their LiB factory construction plans, with operations scheduled to begin in FY2024. This is particularly noticeable in North America, where most of the products are ternary LiBs, and our special polymers have a high share for the type of LiBs.

In response to the US Inflation Reduction Act, we are already on track to procure raw materials to meet demand through FY2026. We are also considering procurement for FY2027 and beyond, and are building a stable supply chain by expanding procurement sources.

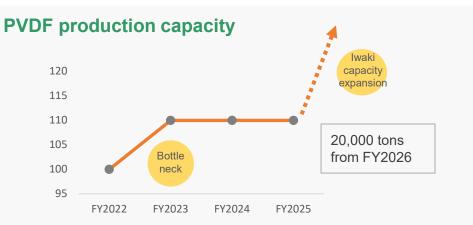
# LiB factory construction plans in North America



\*Will be completed in and after FY2024, according to Kureha research.

Expansion plans are underway in many regions outside of North America, including Europe.

# **PVDF** Business (3)



Production capacity (index), with 1H FY2022 set as 100.



#### **Production equipment**

• Kureha will meet market growth by debottlenecking existing equipment and inventory until March 2026, when the Iwaki Plant capacity expansion is completed.

### R&D / Technology development

- We will accelerate the study of molecular design and additive combinations to develop highperformance grades for ternary LiBs, which is our top priority, and develop competitive grades for LFPLiB. We will also consider collaborating with external research institutions that have cutting-edge technology. To raise productivity, Kureha will work to develop both formulation and equipment perspectives.
- Until now, technological developments related to PVDF have been attained by multiple departments such as R&D, manufacturing, engineering, and process development. However, to unify our resources, a new department (PVDF Technology Project) has now been established. Under this system, we will speed up technological development.
- We will accumulate technologies to ensure that the PVDF expansion at the Iwaki Factory serves as a "model facility" as the number of locations increases in the future.

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# **PVDF** Business (4)

### **Regarding PFAS regulations in Europe**

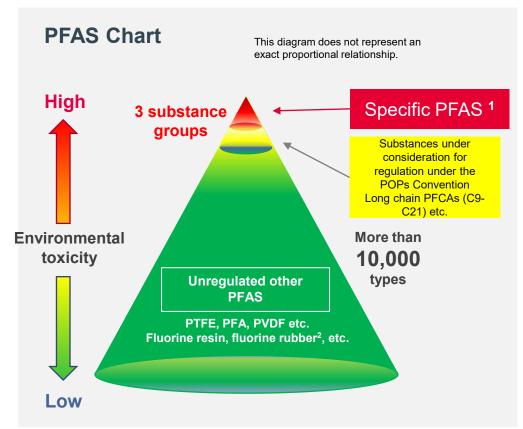
Five European countries—Denmark, Germany, the Netherlands, Sweden, and Norway—have submitted draft regulations targeting PFAS (organofluorine compounds including PVDF).

Expert meetings are proceeding with the goal of adopting a draft text for submission to the European Commission (EC). If the EC votes on the proposed regulation, it could come into effect as early as 2025. Regulations without a grace period could enter into force in 2027.

The European Chemicals Agency (ECHA) has been soliciting public comments on this draft regulation since March, receiving over 5,600 comments from countries, companies, organizations, and individuals by the deadline September 25.

The proposed regulation would, in principle, collectively regulate more than 10,000 types of PFAS, each of which has different toxicity and risks. Kureha believes this is an excessive measure that lacks scientific basis.

We believe fluoropolymer resins, including PVDF, should be exempted from this proposed regulation, and are working accordingly with industrial and chemical industry organizations in Japan and the EU.



#### Note 1: Specific PFAS

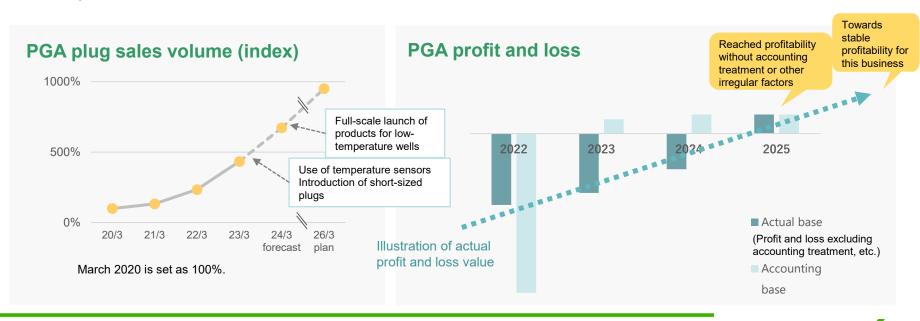
Substances that have been confirmed to be persistent, bioaccumulative, long-distance mobile, and toxic, and are regulated by the Stockholm Convention on Persistent Organic Pollutants (POPs Convention)  $\Rightarrow$  PFOS, PFOA, PFHxS, and related substances. The number of such substances may increase depending on future regulations.

#### Note 2: Fluororesins and fluororubbers

These are chemically and biologically stable and meet the OECD standards for polymers of low concern, meaning they are non-bioaccumulative and non-toxic.

### **Business environment update**

- The number of completed shale oil and gas wells is about 80% of the pre-coronavirus level. The number of gas wells in areas where we have a high market share is expected to recover with the growth of LNG and export terminals in the U.S.
- The ratio of "full bore" wells, in which our PGA resin processed products (frac plugs) are used throughout the wells, has recently reach to a record of approximately 75%. Short-sized plugs are now on sale. The use of sensors that measure well temperature has facilitated the collection and analysis of logs, increasing the reliability of using frac plugs and driving increased sales. New products for low-temperature wells are undergoing field tests. Our scenario under the new mid- to long-term business plan is unchanged.
- Until the end of this fiscal year, we will not produce PGA resin, placing priority on maintaining inventory at an appropriate level. Production is scheduled to resume in FY2024.
- Through the U.S. technology center, which is close to the market, we will develop low-temperature to ultra-low temperature grade frac plugs and explore new applications.



## Shareholder Returns

- Kureha's basic policy is to maintain stable dividends while increasing internal reserves for future business development, with a target dividend payout ratio of 30% or more.
- Aiming for a total return ratio of 50% or more, we will acquire treasury stock of approximately 10 billion yen in fiscal 2023 and approximately 20 billion yen over the three years to the end of fiscal 2025.
- The dividend payout ratio for the fiscal year ending March 2024 is expected to rise temporarily as the business environment of the PVDF business goes through an adjustment phase.
- The acquisition of treasury stock carried out this fiscal year is positioned as a key measure to achieve the target equity ratio.



As of October 1, 2016, the number of common shares was consolidated from 10 shares to 1 share. Figures before that have been converted and presented. Japanese GAAP was used until the fiscal year ending March 2016, and IFRS was adopted from the fiscal year ending March 2017. We acquired treasury stock worth ¥3 billion in the fiscal year ending March 2019 and ¥5 billion in the fiscal year ending March 2020.

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# **Environmental Impact Reduction Targets**

### **KUREHA CORPORATION**

### **CO2** emission reduction

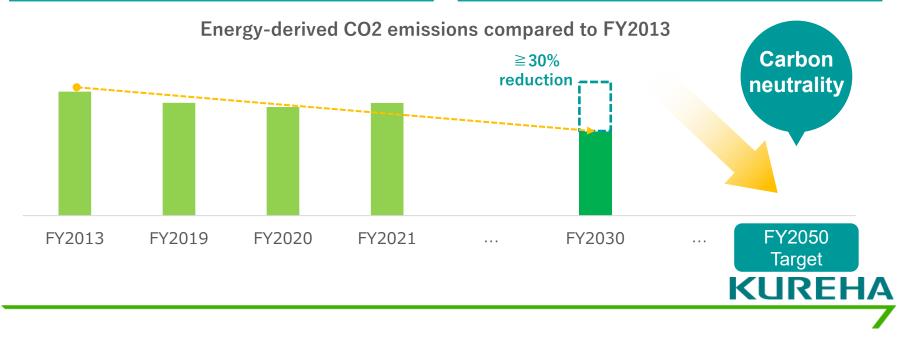
### 30% or more (vs. FY2013 results)

Based on the assumption of achieving carbon neutrality by FY2050, we will promote the use of CO2-free self-generated energy and CO2-free electricity to achieve our energy-derived CO2 emission reduction target for FY2030.

### Zero waste emission ratio

### 1.5%

Achieve zero waste emission ratio 1.5% in FY2025
Although the waste is expected to increase in line with the increase in production of our main products, but we will maintain a zero emission ratio of 1.5% in FY2030 by developing technologies to reduce and recycle this waste.



# Strengthening the Management Base

### Introduction of a stock compensation

 We will continue to share value with shareholders and strengthen the link between the company's performance and director remuneration, giving incentives for directors other than outside directors to continuously improve the company's corporate value. For clarity, we have introduced a stock compensation system.

### Appointment of a female outside director

 The regular general shareholders meeting in June 2023 approved the appointment of one new female outside director. By involving directors with diverse backgrounds and perspectives, we aim to make the decision-making process more comprehensive and balanced.

### **Director composition**



### Strengthening the sustainability organization

- On April 1, 2023, we established the Sustainability Promotion Committee, which is responsible for overseeing and promoting sustainability activities.
- The committees for Compliance, CSR, Information Management and Risk Management, and their subordinate committees, have been abolished and reorganized as organizations (subcommittees) directly under the Sustainability Promotion Committee. This structure enables us to unify Kureha's sustainability management and promote it throughout the company.

### Consolidating our business portfolio

 To build an optimal business portfolio, we will continue to consider and implement measures to concentrate resources into businesses that are truly necessary for the Kureha Group.



### **Employee engagement**

- Conducted employee engagement surveys from FY2023 onwards. Analyzing the results will enable us to understand issues and create a PDCA cycle for improvement.
- Improve engagement by disseminating the management vision, promoting engagement initiatives in
  offices through autonomous activities, creating a safe and comfortable working environment, and
  promoting health management.

### Utilize and develop diverse human resources

- Secure human resources necessary to accelerate management, business, and research strategies, and reinforce production technology capabilities, by strengthening recruitment of midcareer employees with diverse expertise.
- Further promote the active participation of female employees through training, reassignment and active promotion, and improve key indicators such as the percentage of female managers.
- Systematically develop human resources that will contribute to the acceleration of management, business, and research. (Next-generation management human resources, digitally skilled human resources, technical human resources, global human resources, and others))

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# V. Initiatives to Improve Cost of Capital and Stock Price



# Current Situation Regarding Stock Price and PBR<sub>KUREHA CORPORATION</sub>

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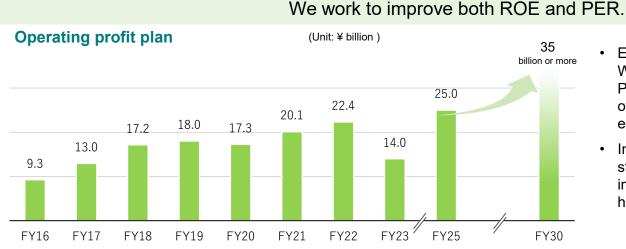
As profits have grown, the share price has risen above TOPIX.

On the other hand, the P/B ratio has been below 1x for a period of time, and measures will be taken to achieve a P/B ratio above 1x.

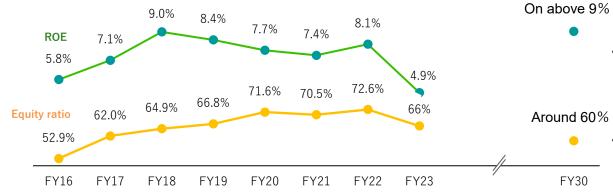


## Initiatives to achieve a PBR above 1x

### **KUREHA CORPORATION**



Equity ratio/ROE trend



- Expanding profits is a key to improving ROE. We will complete construction of a new PVDF facility at the Iwaki Factory by the end of FY2025, laying the foundation for expanding profits from FY2026 onwards.
- In addition to the PVDF business, we are steadily expanding existing businesses and improving profitability of them, such as household goods and the PGA business.
- As profit growth until 2025 is limited, we will achieve ROE exceeding the cost of capital by using financial leverage to maximize capital efficiency through growth investments and shareholder returns.
- We set an equity ratio of around 60% (net ٠ D/E ratio of 0.3).

Around 60%

### <Initiatives to Improve ROE>

Foster expectations by clarifying the growth ٠ story, sending out to the market and promote understanding.

# Cash Allocation (FY2023-2025)

### **KUREHA CORPORATION**

Approx. ¥105 billion

Approx. ¥5 billion

Approx. ¥5 billion

Approx. ¥5 billion Total ¥120 billion

Cash-In	Cash-Out		
Operating cash flow (Approx. ¥80 billion)	Capital investment (Approx. ¥120 billion)		
Bank loans, etc. (Approx. ¥75	,		
billion)	Shareholder returns (Approx. 35 billion yen or more)		

### FY2022 Balance Sheet

Liquidity on hand	Liabilities ¥79.7 billion	
Total assets ¥296.4 billion	Capital ¥216.8 billion	

### Target Balance Sheet

R&D, new business investment

waste reduction, etc.)

(new business development, M&A, etc.)

Environmental investment (carbon neutrality,

Investment into digitalization (ERP system, etc.)

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Capital investment plan (FY2023–FY2025)
Manufacturing capital investment (PVDF capacity)

expansion, maintenance and renewal investment, etc.)

Liquidity on hand	External procurement Liabilities
Total assets	Capital Equity ratio around 60% Net D/E ratio 0.3

- Effective use of debt for capital investment
- Appropriately control liquidity on hand by regularly reviewing cross-shareholdings and controlling excess cash and deposits
- Maintain an appropriate capital structure by utilizing financial leverage
- While prioritizing capital allocation to growth investments, we will also implement shareholder returns to achieve an appropriate equity ratio.

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